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WESTERN FARMER AND GARDENER.

INDIANAPOLIS, FRIDAY, MAY 15, 1846.

☞ Mr. Bateham, in a table of the agricultural papers of the United States, sets down the Western Farmer and Gardener, as a *monthly*, of *sixteen* pages, at one dollar a year. The Farmer and Gardener is a *semi-monthly* of sixteen pages, or thirty-two a month, at one dollar for single subscribers, and fifty cents for clubs of ten and over. Please correct the error.

☞ I. S., Fairfield, Ohio, your letter mentioned never came to this office. This is the first we ever heard of it. We send as requested. Can you obtain a club, as per terms in No. 6?

Many communications on hand will appear in our next.

LETTUCE. — Those who wish fine *head* lettuce, should prepare a rich, mellow bed of light soil; a tough and compact soil will not give them full growth. In transplanting, let them be at least a foot between each plant. Stir the ground often. If it is very dry weather, water at evening *copiously*, if you water at all; but the *hoe* is the best watering-pot for a garden, if thereby the soil is kept loose and fine. We have raised heads nearly as large as a drum-head cabbage, by this method; very brittle, sweet and tender withal.

Early or spring lettuce is usually the best; because the showers of early summer afford sufficient moisture; the tendency of late lettuce to shoot up to seed, arises from the want of moisture, and must be counteracted by artificial supplies.

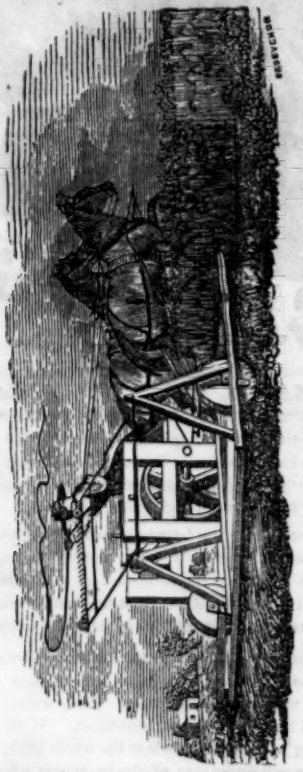
GOOSEBERRIES. — Let those who are accustomed to lose their fruit by mildew, drench their bushes now with an alkaline wash. Lime-water, or diluted lye are the most convenient. With a watering pot, copiously water the whole bush, on the upper and under side of the branches; which can be easily done, if one will lift the branches while another bestows the shower-bath. After they have done bearing, prune out the head, and the lower branches, so as to give a *free circulation of air* under and through the bush. Spade in about them a liberal dressing of leached ashes, and fine charcoal, if procurable.

COOK'S REAPER.

We have received from A. J. Cook, of Delphi, Ia., an account of a new reaping machine patented by him. The machine was first tried in the harvest of 1845, and worked to the satisfaction of the inventor, and, we understand, was highly thought of by those who saw its performance. The horses

walk *by the side* of the standing grain, and the platform on which the knives work, extends seven feet to one side. There is also an arrangement by which the straw is raked into bundles suitable for binding.

It can be graded to cut from four, to fifteen inches of the ground.



The gentleman who brought the communication to our office informed us that the price of the machine would be about seventy-five dollars.

We should be glad to hear, after harvest, the opinions of those who try the reaper.

CORN FODDER, LUCERNE.

We have many readers besides farmers; men who own but an aker or two. Although the practice of soiling cattle, i. e. of cutting their food daily and feeding it to them in a green state, would be profitable to many small farmers, it is especially to be recommended to those living in towns, where pasturage is distant and expensive. Where an immediate supply is required, corn may be sown broad-cast, and cut as wanted, until it begins to tassel, when all should be cut and cured, and the ground sown again, and a third time in the same summer.

But if half that is said of Lucerne is true, and we see no reason to doubt it, it is valuable far above all other kinds of green fodder. It starts very early in spring; may be cut four times in a summer, yielding from four to nine tons to the aker, according to the condition of the land. It is much relished by cattle, imparts no bad flavor to milk, is a very fattening food, and one sowing will last ten years. One aker is sufficient for four or five cows. It may be sown in drills, if the land is foul, and kept clean by hoeing, the first year; but on clean ground it may be sown broad-cast. It is hardy under the infliction of severe frosts; and surpasses all grasses in endurance of drouth, its enormously long roots affording it moisture from a great depth. An English writer says, its roots have been found from ten to fourteen feet below the surface; and an American writer says, that it made, on his land, roots three feet long the first summer.

Where it is sown broad-cast, it is difficult to get it through the first year. But if sown in drills ten inches apart, and hoed once or twice, it may be cut twice or thrice the first season, and be entirely established before winter.

A light, sandy soil is the best: it should not be put upon heavy and non-friable soils, though it will flourish on even these, when fully established. Ten pounds of seed to the aker is enough, if drilled; fifteen pounds, if sown broad-cast. The seed ought not to cost more than thirty-seven or forty-three cents a pound, and can be had, we presume, in Cincinnati.

The only reason, that we can imagine, why this plant should not be extensively cultivated is, the disrelish which our farmers too often have to any crop requiring much care. To slash along with a plow is all well enough; but to hoe and weed is rather tedious. But these operations are required only during the first part of the first year. Will no one among us try it?

MARL, FOR MORTAR.

A correspondent, some time ago, enquired "the value of marl lime, as compared with stone lime for mason work, or on oak-opening soils;" and as no one has replied, we must do it ourselves, as best we can.

It is impossible to give a specific answer to our questioner, inasmuch as marls vary to such a degree that what is true of one is not of another. They contain from eight to eighty-five per cent. of lime. Some are a loose sandy powder, some

tenacious and clayey, and some are hard and stony. We give a table of marls from Sprengel's Analyses, which, at a glance, will show the variity of marls.

COMPOSITION OF MARLS FROM

	Launeburg. *powdery.*	Osnabruck. *stony.*	Magdeburg. *clayey.*	Brunswick. *loamy.*	Weser-marsh. *powdery.*	Brunswick. *stony.*
Quartz-sand and Silica	5.6	23.0	58.4	73.4	78.9	71.1
Alumina	0.4	10.0	8.4	1.9	3.1	4.0
Oxides of Iron	4.2	1.9	6.7	3.2	3.8	6.5
Do. of Magnesia	trace	trace	0.3	0.3	0.3	1.1
Carbonate of Lime	85.5	35.0	18.2	18.1	8.2	13.3
Do. of Magnesia	1.25	0.9	3.8	1.5	3.0	2.6
Sulphuret of Iron	—	7.3	—	—	—	—
Potash and Soda, combined with Silica	0.05	trace	1.6	0.8	0.9	0.2
Common Salt	0.03	trace	trace	trace	0.1	trace
Gypsum	0.06	0.9	2.1	0.1	0.5	trace
Phosphate of Lime (bone earth)	2.3	0.5	0.5	0.7	1.2	1.2
Nitrate of Lime	0.01	—	—	—	—	—
Organic Matter	0.6	carbon 20.5	—	—	—	—
	100	100	100	100	100	100

We cannot speak with positive knowledge upon the use of marl-lime for mortar. We have had no experience, nor can we find any one who has had. We give, then, only an opinion. The marls of low per cent. of lime we should suppose to be decidedly unfit for mortar. A marl containing a high per cent. of lime would be more or less valuable according to the other ingredients. The *water-cements* are formed of lime containing magnesia, clay, and ferruginous sand. If marls are found containing a large per cent. of lime, with clay, iron, or magnesia, we should regard it as good for hydraulic cement.

If they contain lime with clay and sand, we should suppose them fit for an inferior mortar for dry brick work. The clay which exists in notable proportions in ordinary marls would be prejudicial to it as a cement. If, however, any one has practical knowledge of this matter, we shall be glad to have these opinions, formed upon the nature of the ingredients, confirmed or set aside, by a rehearsal of it.

It will be seen from the table that the kind of marl used will determine the soil which will be benefitted by it; and also the quantities to be used.

Wet, peaty soils, will receive very heavy doses of marl with benefit.

Clay soils, will take large quantities of marl, strong in lime and sand.

Light and porous soils will require less lime, and be benefitted by marls in which clays predominate.

When soils are rich, already, in lime, marls will not benefit them. They are not hungry, and of course will not eat. But it is not to be supposed that a soil lying on limestone rock, is, of course, rich in lime. The lime must be comminuted and mixed intimately with the soil to be of any avail. No lands, often, are more needy of lime than those resting on lime-rock.

PLUMS AND THEIR ENEMIES.

Multitudes of men have had plum trees, and every year, for ten years, have seen the fruit promise fair at first and then prematurely drop, without knowing the reason. Even well-informed men have said to me that it arose from some defect in the *tree*, from too much *gum*, from a worm at the *root*, &c.

The plum tree is very hardy; is less subject to disease than most fruit trees; its fruit is highly prized; and the varieties of it are numerous and many of them delicious. By a proper selection of trees a succession of fruit may be had from July to November. The trees are usually sure and enormous bearers, every year. With so many good qualities the cultivation of the plum is well nigh prohibited, as a garden or orchard fruit, by the valor of one little bug!

The *Curculio*, (a very hardy fellow, with a constitution yet unimpaired by such a name as *Rhynchænus Nenuphar!*) is a small beetle, about a quarter of an inch long, which attacks the plums almost as soon as the fruit has set. They seek this, and almost all smooth-skinned fruits, as a place of deposit for their eggs. Many of the facts which we shall narrate, were mentioned to us by Mr. Payne of Madison, who has closely and curiously observed this depredator.

An incision is first made, of semicircular form, by a little rostra or lancet which he carries in his head for this very purpose. After the opening is made, the curculio deposits an egg therein; then changing positions again, it carefully, with its fore legs, secures the egg in its *nidus*, and pats the skin under the edge of which its treasure is hid-

den, with repeated and careful efforts of its feet. Where fruit abounds it deposits, usually, but one to a plum. Be we have had trees, just beginning to bear, whose few plums were scarified all over.

The egg hatches to a worm, and this feeds on the plum, causing it prematurely to fall; the insect issuing from it, enters the ground, to undergo its transformations, and soon to reappear, a beetle, ready for fresh mischief-making propagation.

The climate of the west, is entirely glorious for all manner of insects. We can put the east to shame in the matter of aphides, cockroaches, cutworms, army and wire-worms, curculios, peach-worms, grubs, &c. &c. There are many questions relating to the history of insects, about which eastern writers are in doubt, not at all doubtful with us.

1. Do the larvæ remain in the ground all the residue of the summer, and come forth only in the ensuing spring? In cold latitudes it may be so. Harris says, that they undergo their transformation in twenty days. Downing admits this of a few stragglers. But the main supply of bugs, he thinks, remains all summer and until spring, in the ground. But with us the curculio is not exclusively an early summer insect. It is found, in its appropriate haunts, through the whole warm season. Mr. Payne, put plums containing the worms, into a glass, and in eleven days obtained full-grown curculios. In cool regions they, probably, have but an annual generation; but in warm and long summers, in the west, they reproduce often in each season.

2. The mode of ascent has been a matter of doubt. J. J. Thomas, in the Fruit Culturist says: "It has the power of using its wings in flying; but whether it crawls up the tree or ascends by flight, appears not to be certainly ascertained."

Downing, admits that it flies, but says: "How far this insect flies is yet a disputed point, some cultivators affirming that it scarcely goes farther than a single tree, and others believing that it flies over a whole neighborhood."

Kenrick says: "They crawl up the trees," and he quotes an author as saying: That of two trees standing so near each other as to touch, the fruit of one has been destroyed and the other has escaped; so little and so reluctantly do these insects incline to use their wings." Dr. James Tilton says, in the Domestic Encyclopedia, that "they appear very reluctant to use their wings, and perhaps never employ them but when necessity compels them to migrate."

It is true that the curculio, in cold and chilly weather, is disinclined to fly; but give it a right murderously hot day, and "McGregor's on his native heath again." Just before a thunder storm, in summer, in a still, sultry, sweltering day, they may be seen flying among the trees as blithely as any house-fly; alighting on your arm, or hand, and springing off again as nimbly as a flea.

All remedies founded on the idea of their crawling preferences will be signal failures. Troughs about trees, bats of wool, bandages of all kinds about the trunk to impede the ascent will be found as useful as would high fences to keep crows from a cornfield, or birds from the garden.

All remedies for this pest succeed to a charm where the curculio does not abound; and almost every one of them fail in places really infested with them.

In cities, and in country places which are far removed from all orchards or gardens, the crops may be saved. It is not difficult to defend a tree against all the curculios that are *bred upon it.* Pavements; hard-rolled gravel; gathering up, daily, the fallen plums and destroying them; the application of salt, and many other remedies may succeed where the curculio from other gardens or orchards, cannot easily migrate to supply the trees with a fresh brood. Trees in cities, and in retired places, on this account, often bear plenteously.

But of what use is it to destroy five hundred larvæ, if twice that number of emigrants, from some other quarter, are anxious, the next spring, to *squat* upon your trees, or to *enter* them, in land-office style, most nefariously? All remedies founded on the destruction of the larvæ will be totally useless if your trees can be reached from some infected point abroad, as we have found to our sorrow. In our own experience, and in that of other amateur-cultivators of fruit, the pavement, salt and all have been "love's labor lost." But in the experience of others, in climates where the curculio does not abound, or in secluded situations they have proved effectual.

The remedies to be employed, in ordinary cases must be such as will constantly molest the insect at his work. Enclosures, in which swine root, and rub against the trees; lanes, where cattle resort, to rub off their hair in spring, to shade themselves in summer—these are the best situations. In yards and gardens plum trees should be placed upon the most frequented paths; close to the well, by the kitchen door, near the wood-house, so that, as often as possible, they may be jarred in passing and repassing.

Where a few trees stand apart in the garden, it is said that, daily, morning and evening, by spreading a sheet under them, and giving the tree

a sudden and violent blow with a mallet, the insects will drop and may then be gathered and destroyed. This should be performed while it is cool, as then, only, the curculio is somewhat torpid. If this course is pursued, a block should be put upon the tree, to receive the stroke, with a bit of carpet or some soft pad to it, that the bark may not be injured. A white sheet should be spread under the tree to catch the falling robber.

A few trees will suffice for a private family, and the fruit must be earned by careful watchfulness. Those who are too indolent, or careless, or indifferent to the luxury to bestow the requisite attention through the months of May and June, may spare themselves the trouble of planting plum trees. Plum *orchards* are not to be thought of.

Although the curculio chiefly delights in the plum, it scruples at no fruit. It may be found upon peaches, cherries, nectarines, apricots, gooseberries and currants. Mr. Prince, of Flushing, Long Island, a nurseryman of celebrity, published a list of plums, said to be unmolested by the curculio. This is all moonshine. The fact is, that on the northern seaboard, this insect does not exist to such an extent as with us. Mr. Manning, of Salem, Mass., was hardly troubled with them at all. Where no trees suffer much, some trees may be expected to suffer none. This is the case with Downing's celebrated Newburg nurseries, according to the editor of the Albany Cultivator, (vol. 1, for 1844, p. 299,) who says: "neither worms nor curculio do much damage here."

But let no one of the west or south be deluded into buying any variety by hopes so surely vain.

We should be glad to have thorough trial made of the effect of pungent odors. Insects are, without doubt, much annoyed by a variety of smells. Coal tar has been applied to plum trees, shingles dipped in it, being suspended in the tree, and, it was thought, with good success. Turpentine is mentioned as producing similar results. We shall try this latter article, and should be glad to have others do it.

Manure for Cabbages.—The time is at hand for transplanting cabbages, and every one, of course, wishes to do it in the best manner. We give a hint received from the Gardeners' Chronicle. Set the plants without manure. When they begin to grow, open holes by their side (with a sharpened stake, or old spade-handle) taking care not to touch the plants. Now take soapsuds, chamber-lie, soot, liquid manure from the barnyard, and thicken them to the consistence of paint with soil; fill the hole with this, and with a hoe close it by drawing up a little earth. It is said that cabbages are greedy of salt in a weak solution. Let it be tried; and inform us of the result.

CUT-WORMS AND HUSK-RUFFLES.

Cut-worms are very plenty this spring. Farmsrs may look out for lively times in their corn fields, or it will, very likely, be harvested for them some time before they are ready. We know of no remedy for them, on the farm, except such as freezing them by late plowing, &c. In the garden, patience and pinching are the only resorts, with the exception of one to be mentioned. Go over your stock every morning, where a plant is cut, search for the worm, which, nine times in ten, will be found buried within an inch or two of the remains of his nocturnal banquet. One or two days search will usually free any one patch from these marauders; but not until half your plants are sacrificed. They are omniverous; at least in vegetable food. Our lettuce did not put them to sleep; our rhubarb did not prove at all drastic; cabbages and tomatoes, peas and beans, were mere luxuries; they sweetened their breath with onions; and evinced their taste for flowers by cutting some of the choicest rose sprouts; but we laughed in our sleeve, as we set out a fine row of bull peppers,—and so did they; for they eat every one of them with a relish that would have quite ravished the heart of a botanic doctor.

The plan alluded to, of escaping them, is to employ corn husks in transplanting them, for wrappers. A husk is loosely bound around the stem of cabbage plants, tomatoes, &c., from the leaves to the roots, and the plant set so as to leave a full inch of the husk-shield above ground. This requires a little more time and pains; but not so much as to set your plants a second time; and we have in every instance, since we tried it, saved our plants, in spite of their teeth. The good lady who informed us of this husk-ruffle, has our fervent thanks.

Raising Melons.—A method of raising melons is given in the Ohio Cultivator, by Mr. Neff, of Yellow Springs, which we should be pleased to have some of our readers try. In the centre of a bed about twenty feet square, he forms a mound of earth, two feet high and seven feet diameter at the base. On this mound is placed a barrel, both heads being knocked out, which is filled with rich manure. On the slope of the mound, from the barrel to the base, plant the seeds and let the vines run over the bed. The ground is spaded as the vines grow, that they may have fresh soil to run upon. In dry weather, two or three buckets of water are poured into the barrel, which supplies the vines with fertilizing moisture.

BOOK-FARMING---AGAIN.

You are pretty hard on anti-book-farmers, but you must remember there are two sides to every question. The bombastic, pedantic manner, in which the science has been treated of, and the fact, that the editors and book-makers on the subject have generally been men who, while they professed a profound love for agriculture, have never embrowned their hands at it, ought, partially, to excuse plain, common farmers for not admiring the men or studying their technics. I admire science, but I love common sense, and I have yet to learn why it would not look as well on paper as any where else. A. P.

Unquestionably, there are two sides to this question; and both of them *extremes*, and therefore both of them deficient in science and in common sense. If men were made according to our notions, there should not be a silly one alive; but it is otherwise ordered; and there is no department of human life in which we do not find weak and foolish men. This is true of farming as much as of any other calling. But no one dreams of setting down the vocation of agriculture because, like every other, it has its proportion of stupid men.

Why, then, should agricultural *writers*, as a class, be summarily rejected because some of them are visionary? Are we not to be allowed our share of fools as well as every other department of life? We insist on our rights.

A book or a paper never proposes to take the place of a farmer's *judgment*. Not to read at all is bad enough; but to read, and swallow every thing, without reflection, or discrimination, this is even worse. Such an one is not a book-headed but a block-headed farmer. Papers are designed to *assist*. Those who read them must select, modify, and act according to their own native judgment. So used, papers answer a double purpose; they convey a great amount of valuable practical information, and then they stir up the reader to habits of thought; they make him more inquisitive, more observing, more reasoning, and, therefore, more reasonable.

Now, as to the contents of agricultural papers; whose fault is it if they are not *practical?* Who are the practical men? who are daily conversant with just the things a cultivator most needs to know? who is stumbling upon difficulties, or discovering some escape from them? who is it that knows so much about gardens, orchards, farms, cattle, grains and grasses? Why, the very men *who won't write a word for the paper that they read*, and then complain that there is nothing *practical in it*. Yes there is. There is practical evidence that men are more willing to be helped, than to help others; and, also, that men sometimes blame others for things of which they themselves are chiefly blameworthy.

As we have given a portrait of an anti-book-farmer, we will, before long, give a drawing of an opposite sort.

QUESTIONS AND ANSWERS ABOUT GRASSES.

I have several questions to propose:

1. What ought I to do with my corn-stalks? People along Laughery bottoms generally rake and burn. I aim to plow mine under, supposing it to enrich the land and keep it loose; but they are greatly in the way. The lad who is to plow for me argues stoutly that the ashes will do more good than the stalks. (My ground is bottom land.) What are the constituents of dry corn-stalks?

2. Will orchard grass grow well on run-down bottom land? If not, what grass would you recommend? (Timothy won't set close.)

3. Will orchard grass grow well on a slough or bayou where there is water good part of the spring? Is it like red-top for that.

A. PURCELL.

Guionville, Dearborn Co., Ia.,
April 17, 1846.

1. We should suppose that bottom land would be sufficiently *loose* without any efforts to make it so. Bottom land which is kept to corn, particularly if the corn is "hogged," is apt to be too loose. We think the stalks would be better as a manure if burned, than if rotted. Besides, it would be a troublesome job to plow them under, and they would be apt to interfere with the working of the corn, afterwards.

2. Timothy will become "close" enough if one will put in seed liberally and wait for it to establish itself. Where a single crop of hay is all that is required of the land, there is, perhaps, no grass that is superior to timothy.

But if one wishes to cut a second crop, or if it is desired to pasture the ground, either early in spring or after mowing, the orchard grass (Dactylis glomerata) is preferable to timothy. It grows remarkably quick after being cut or eaten down, and it withstands drouths with great vigor. If grass is wanted for the scythe, take timothy; if for the sythe and pasturage conjointly, take orchard grass. This grass tends to grow in *tussucs*, on which account the English sow liberally,—three bushels of seed to the aker.

A "*run-down*" piece of bottom land ought not to be known on a farm. The very best thing to which such land can be put is, a rotation; by which it shall gather heart again.

3. No; orchard grass prefers a moderately dry soil. The red-top (*herdsgrass* of the middle and southern States, *Agróstis vulgàris;* the herdgrass of New England is the timothy) does well in

moist and rather wet lands. Another variety of this grass, *A. stolonifera*, does well on loose, boggy soils. It extends itself by lateral roots, forming sods on loose, wet soils, sufficiently firm for the tread of cattle.

AN ACRE OF WORDS ABOUT AKER.

Our spelling *acre* according to Webster's method—*aker*, has attracted no little attention, in a small way, both far and near. The date of the following letter evinces its author, whose name gives credit to whatever he may write.

In reading the Farmer and Gardener, the writer has been regularly brought to a halt by one little word. At first he thought it an accident in correcting the proof, or the chance whim of some correspondent; but its continued use has forced him to appeal to the dictionary, and to Webster, of course, first. There it was found: "AKER, Gr. agros; L. ager; Sax. acer. The "most correct orthography is aker. See acre." A little above in the same column, the writer's eye saw "AKE, less properly written ache. (Sax. ace.)" Then acre was looked up and found as follows: "ACRE, (Sax. acer, acera, or œcer.)" Walker was looked at. There AKE was found, but AKER was not. Johnson agrees with Walker precisely. Johnson and Walker derive ACRE from the Saxon ÆCRE. Whether Johnson and Walker are correct in the spelling of the Saxon word, or whether Webster is right, the writer does not know; but he does know that nothing can be more absurd than a large portion of the derivations given by men learned in words—philologists; and he does know, that he found in his Lexicon, appended to the Greek agros, this remark: "hence, the English acre." And there he supposes Webster got his derivation; a derivation without the least foundation in the words as used in the Greek and Latin, and in the English, and built entirely on the resemblance of sounds, near enough, it is true, to satisfy a book-worm in his closet, but not sufficient to uproot the universal practice of English scholars. Webster found the use of ake, from the Saxon ace, authorized in the place of ache from the Greek achos, and hence undertook to substitute aker for acre. But there is no analogy: it is the reverse. In preferring ake to ache, we prefer an approximation to the Saxon for a copy of the Greek form. But in adopting aker, from "agros, ager, acer," instead of "acre from œcer" we substitute the Latin and Greek form of the termination for the Saxon. If there was any analogy, it would not be difficult to authorize a departure from established usage. Webster himself practically acknowledges this continually. For instance: the English word climax, is pronounced klimax, and is derived from a Greek word of precisely the same meaning and sound, spelled with a *k*. Here, in pronunciation, we adopt the Greek original; in spelling we preserve the Saxon form. Now, if you will write aker, why do you not write klimax? Why not be consistent throughout? Why not print korn? it is derived from the Saxon corn; and if the Saxon *cre* or even *cer* is to be spelled KER, why not spell the Saxon cor, KOR? Why should we not have akorn instead of acorn? it is derived from the Saxon acern. Why do not you write, why did not Webster direct you to write always k, for the old-fashioned c, when that c is pronounced as k? Why not print klemancy, and klarify, and kontrakt? Why make an example of acre and konkokt it into a companion for AKE? CAN, to be able, may be derived from the Saxon cannan to know, but more probably from the Danish, KAN, to be able. COME, is derived from the Saxon, but it is pronounced as if written KUM. Hence there is some analogy for the phrase, "kan't kum it." But will you use it? The fact is, k is not a Saxon letter, any more than it was a Latin letter. In Latin, an effort was made to give it possession of one word, but in vain. Even Mr. Webster gives calendar as preferable to kalendar, and does not notice kalendar at all. In English, k has obtained possession of four verbs; keep, kill, knead, know, and of five nouns, key, kiln, kin, knave, knell, in common use and of undoubted Saxon origin. There are fifteen other words; kip, knit, and knock, keel, keen, kennel, kittle, king, kitchen, kan, knife, knight, knot, knit, and knuckle, which may be derived from Saxon words, but which are now, probably, adopted in the English from the Dutch or German, and which are of common use and of good standing. It is uncertain when the German or Greek or Sanscrit, or whatever else it is, k was introduced into the above words in place of the Saxon c. But it was introduced at an early period; it has retained possession of these few words only; why now endeavor to extend its use? It is neither as good nor as easily pronounced as the c. It is foreign, and it is troublesome. You may rest assured that AKER

KAN'T KUM IT.

Vincennes, April 27, 1844.

It is very difficult to fix on any rule for any thing in our language. Etymology is chiefly useful in settling the primitive signification, and is, or ought to be, scarcely at all authoritative in orthography. Where two languages are very different, it is absurd to attempt the forms of the one in the other. In respect to *idiom*, no one dreams of transferring it from one to another. Often times it is equally absurd to transfer mere literation, as in the Greek-blooded word *Phthisic* for Tisic, or as Walker would have spelled it, Phthisick! Who rebels because *demesne*, as it is written in our best authors until within a little time, is now spelled *domain?* We see no reason why Anglicised words should, against all our notions of sound, retain a cumbrous foreign spelling. Words adopted into a language by the *ear*, which are spoken before they are written, generally conform, on being written, to our modes of spelling. But words introduced first by the eye, as they are written, for a long time wear the original spelling. Thus some foreign words are spelled by one method, and some by another.

Custom is usually regarded as determinate, in the matter of spelling, pronunciation, idiom, purity, &c. But, in respect to spelling, custom is

not long the same. If one will examine our literature from the time of Henry VIII, he will find a constant succession of changes in spelling, both for good and for bad. *I* has been generally substituted for **Y**, as in *Lykwyse, accordynge, beyng, certayne.* Sir Thomas More wrote, *hym, thynges, desyer, myndes.* Skelton, the Poet Laureat, has *sentencyously, dyd, advysynge, hyll,* &c. &c.

There has, too, and wisely, been a constant tendency to drop all *unsounded* letters. What earthly use is there of lugging along letters which are entirely mute? In old, but classic authors we have Godde, dydde, nowe, whiche, pulle, beste, suche, couerte, (court) betwene, begunne, &c.

Within our own memory the final *k* is lopped off from words where it had a perfect sinecure, as in musick, &c. *Kan't kum it,* does not look any more odd to our eyes than our spelling would have looked to those who wrote one hundred years ago.

It it be asked why we do not spell every word by the same rule that we do some; we reply, that violent and sudden changes in languages are *impracticable;* and, as in every thing else, are not desirable. We are glad to see spelling simplified, and shall move along just as fast as we can do it with a reasonable prospect of carrying the public.

It is not a matter of conscience; we have no necessity laid upon us to reform the language; no call to be *literal* martyrs; it is a matter of *convenience* and *taste,* to be done or omitted as one pleases. It would be more inconvenient to stand alone with all writers against us, for the sake of spelling consistently, than to spell foolishly and superfluously in conformity to inveterate practice. Therefore, for the sake of company, we still spell quite absurdly

It is called *inconsistent;* and by men, too, who spell trough, cough, enough, though, through, bought, six dissimilar sounds (*au, ow, oo, o, uf, off.*) by the same combination of letters! If consistency be the question, every English writer that ever lived, is a mere bundle of inconsistencies. Every continental, living language, and the dead classic languages have thrown in their contributions, and our tongue comprises the scraps, odds and ends of all lands, with all the diverse peculiarities of each language more or less retained. Under such circumstances, when no man writes a sentence without spelling inconsistently, it is quite ridiculous to oppose a simplification of spelling, because we cannot do, at once, what it is only practicable to do gradually. As fast as the public is able to bear it, we shall be glad to reduce all cumbrous spelling to a consistent simplicity.

Our correspondent declares, that the derivation of AKER from the Latin and Greek, is "without the least foundation in the words as used in the Greek and Latin and in the English, and built entirely on the resemblance of sounds" &c. The facts are the other way. In the Greek, and in the the Latin, it meant simply a field, an open, cultivated spot. Now, this was the meaning of the word in English, until it was by statutes limited to a particular quantity (31, Ed. III. 5, Ed. I. 24, Henry VIII, as quoted by Webster) and this is the meaning, yet, of the word in German (*acker*) Swedish (*acker*) Dutch (*akker.*) There is, therefore, ample foundation in the *use* of the word; and the *sound* our friend gives up.

In almost all the languages of the Teutonic family, of which ours is one, the word is still spelled with *k;* and so it is in the Asiatic languages, from which, probably, both the Teutonic and the Greek, alike, borrowed it.

The spelling acr*e*, as also centr*e*, theatr*e* we, probably, derived from the French; to which language we owe the emasculation of many a noble Saxon word.

In the New England Farmer for April 22, our othographical sins are thus set in order before us:

"☞ The 'Western Farmer and Gardener,' at Indianapolis, Ia., is an excellent journal — very. It has only one feature that we dislike, viz: — it spells ACRE, *a-k-e-r!* We are somewhat surprised at Bro. Beecher, who usually evinces such good taste, as well as such good sense, should adopt such an ugly-looking substitute for an old word of so much better appearance, although supported in it by the prince of lexicographers.

"*A-k-e-r!* Wheugh! Bro. editors, *hoot* at it till it shall become obsolete. In Todd's, Johnson's, and Walker's, and Worcester's dictionaries, *fuel* is spelled *fewel,* as the most correct way. This is odd enough and bad enough — but it is hardly so unsightly as *aker.*"

Nothing becomes obsolete until it has been in vogue. But pass that: what a sight will the hooting confraternity present! I imagine Maine Farmer Holmes — a plump, short, dapper gentleman, giving a long howl, that sounds so ludicrous, that he draws back from the open window to laugh. Our more sober Breck performs the euphonious duty with such conscientious heartiness, that up starts the man of Buckwheat from his (mis-spelled) Plough*m*an's chair, as also does the Cultivator Cole — a trio not practiced to sing together. The uproar reaches Albany, and surprises him of the Cultivator, who hoots supplementary, with such voice as he happens, in his surprise, to have on hand. Next, toward the west, Dr. Lee shall give a scientific roar or hoot such as will make his laboratory jar again. Down across the lake the hooting (not *hunting*) chorus goes (what will the sailors think is to pay!) to Elliot of the yard-long-

named Magazine,* who, hoarse with lake fogs and winds, shall put in so base a hoot, that Wight and Wright of the Prairie Farmer will howl of mere fright, if for nothing else.

Audacious men! we utterly defy you! We shall pass by the whole crowing brood of Polands, Dorkings and what-not; and raise a breed of genuine owls, to be our champions in this dire necessity. We say, peremptorily, that we will not bet on any match between hooting birds and hooting editors. But our serious opinion is, that, in grave solemnity of looks, and in professional hooting, a half dozen well-trained owls will beat the whole of you. However, we are open to conviction, friend Breck, if you doubt it.

TICKS ON SHEEP. — A clergyman, who was early in life a regular-built shepherd, after the old-fashioned style, living with his flock, requests us to call the attention of all interested in sheep to the prevention of ticks adopted "in the place he came from." A trough, large enough to hold a sheep, was filled with a decoction of tobacco; as soon as the sheep are sheared, they are plunged all over in, except the nose and mouth (these organs being sacred to chewers and snuffers.) The lambs are treated in the same way, and a world of trouble to the owner, and yet more to the flock, is saved by this nauseous bath.

COMMUNICATIONS.

COCKLE-BURS POISONOUS TO HOGS.

TERRE-HAUTE, 4th April, 1846.

Mr. Beecher: — Is it generally known that the newly-sprouted cockle-bur is *death to swine?* A tenant of mine has lost ten, mostly fine large hogs, and I hear of many similar losses by farmers on our prairie. Those on my place were running in a stalk-field where the corn (in consequence of the heavy rains last summer) had been badly tended, and consequently these disagreeable weeds had got a rank start. They had sprouted about three inches and the hogs were eating them freely when several of them were suddenly taken ill, and seven or eight died the same day.

They were immediately taken from the field, when all symptoms of sickness among them vanished. I communicate the fact to place farmers on their guard. L. H. S.

We are inclined to question the *cause*. Had the hogs eaten the old and hardened burs, which lie upon the ground, often, two years without decaying, we should expect some mischief. We are at a loss to know the reason of death from eating the young and tender plant, since *cattle* feed upon it every year with great impunity.—*Ed.*

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* *Western Reserve Magazine of Agriculture and Horticulture!*

A NOTICE OF SOME APPLES.

In your last number you published an extract from my letter of the 28th ult. respecting the Bracken and other apples. It is always my desire to give honor or credit to whom it is due. Had those remarks been intended for publication, I should have given to Mr. William Pitt Putnam, of Belpre, Washington county, the credit of having discovered the Bracken (sometimes called Breckredge) apple, in Bracken county, Kentucky, in an orchard of seedling apple trees, and of having introduced it to the notice of the cultivators of the apple, at and about Marietta; and to Judge Joseph Barker, the credit of having communicated these facts to me; and also the fact that the Rome Beauty or Gillet, is a seedling taken from the nursery of Israel Putnam, late of Union township, Washington county, about twenty years since, and is now extensively cultivated along the Ohio River. It goes safely to New Orleans, and there commands a better price than any apple sent from Marietta or its vicinity. Judge Barker is an extensive cultivator, and shipper of apples, and is the only person, as he believes, who has the Rowland's Keeper in bearing, except Mr. Rowland, the owner of the original seedling tree. This apple is a large green, and keeps well till May.

I consider it not only proper that these credits should be given, but of some importance, as some recent instances have proved, that if error exists it may be traced to its origin.

Last spring, I received from Louisville, some trees called Her's June. The Bracken ripens, with us, about the middle of June. Are these the same as the Bracken, or as the Red June sent me by you?

The writer of the articles on the mode of propagating the apple, is not passing through this world with both eyes shut, and I will venture the assertion, that he is not an extensive reader of novels or works of fiction, but, studies nature and her works. Be be pleased to write me his name, and address, as I desire to cultivate his acquaintance. I desire to know, too, at what time those grafts (indulge me in calling them grafts; instead of scions, because I prefer the term graft, and because, agreeably to Walker, if they *were scions*, when I received them, they are now, all *cions*,) were cut, and how preserved — whether in earth under cover or out of doors. I am desirous of knowing this, because they kept better than any of the numerous packages received by me during this season. They must have been selected, too, with great care, as in almost every instance the wood was firm and solid. How this could be, amidst the extensive blight and destruction of your fruit trees, I can hardly conceive. I entertain hopes of saving each variety sent, as many of the grafts are now in leaf.

Every amatuer cultivator of fruits, will sympathise with you, in the loss of so many of your trees. It affords me great pleasure to inform you, that so far as my observation extends, our fruit trees, from the tenderest seedling to the oldest trees, have passed through the late unusually severe winter uninjured, and the bearing trees are now loaded with blossoms or young fruit; the weather is warm and the recent rains, after a protracted drouth, has given an impetus to vegetation, quite unusual with us at this season of the

year. The leaves are now so expanded on fruit trees, as to afford a pretty secure protection against frosts. In this (the Muskingum) valley, you may not only expect an abundance of fruit, but good healthy trees from which to renew your nurseries and orchards.

McConnelsville, O. S. A. Barker.

We have never heard the Red or Carolina June called Her's June, or Bracken. We should be glad to learn, of any who know, if these fruits are identical.

If you refer to the article on page 356 of the Indiana Farmer and Gardener for 1845, you will perceive by the credit given, that it is from Downing. From such a source we should expect it to be good.

The grafts were selected by Aaron Aldredge, a nurseryman of this place, from his orchard. Whatever he professes to do thoroughly, you may always rest assured *is* well done. We have received trees from nurseries east and west, but never have seen better packing for transportation than at his nursery. — *Ed.*

REVIEW NO. 6, OF VOLUME I.

Seed Peas, p. 146. — If the editor *did* "try the process" of bottling his seed peas as here promised, his readers, I think, would be profited by a report from him. Some things have to be told many times over, to arrest the attention of all. If every one who has prevented the depredations of the bug by bottling his peas, would report, many others might be induced to follow the practice.

Aker, p. 152. — I do not know that this spelling (out of Webster) ever found a place in any writing, until it appeared, a few years ago, in the Farmer and Gardener of Cincinnati. Its adoption in the late numbers of the Western Farmer and Gardener, to the exclusion of the old orthography (acre) induces me thus to mark its earliest introduction into use.

Cucumber Bugs, p. 153. — This little article has had a very general ride over the country, in the papers of Virginia, Maryland, &c., without its label of parentage. It is not worth complaining of, however, except for the benefit of the Farmer and Gardener.

Grasses, p. 152. — I avail myself of this occasion to say, that last year I received from the editor (H. W. B.) eight kinds of grass seeds, to which I devoted a part of my garden. The seeds were sown in drills 5 mo. 31st; and as the season was very dry, I watered the bed daily two to four times, until the seeds germinated. The *Festuca ovina* did not vegetate; nor did the *Trifolium incarnatum*, though twice sown. All the seeds were put into the ground, dry. The *Lolium perenne*, came up in thirteen days; the *Alopecurus praténsis* in sixteen; the *Anthoxánthum odorátum* in sixteen; *Cynosúrus cristátus* in fourteen; the *Festúca praténsis* in nineteen days: — all under a noon temperature averaging 76°. The *Lólium perénne* (variety *bienne*) came up in eight days, under a temperature at noon of 80° Whether the seeds had lost their vegetative properties or not I cannot tell, but, with the exception of the *Loliums*, very few of the foregoing grew; and now that the winter of 1845–6 has tested the endurability of the plants, I find five plants or shoots of Lolium perenne, eight of Lolium v. bienne, two of Alopecurus, and perhaps one of Cynosurus, struggling for existence. Vigorous seeds and more favorable circumstances would no doubt have greatly modified the result of this experiment.

Two Receipts, p. 176; the one for "sore backs" mentions a "solution of vitriol;" but there is a blue, a green, and a white vitriol: one, a compound containing copper, another containing iron, and the third, zinc. Is the "mixture" intended for the dry, the foot-rot, the pelt-rot, or for the rot that "rotteth shepe," as Fitzherbert writes? If for sheep, it is not said whether the animal is to use it as a smelling bottle, or to rub it on the spine, or pour it down the throat, at one or a dozen times, or whether it is to be simply looked at, as Jacob's flock looked at his pilled rods.

Scratches in Horses, p. 177. — I do not know that there is any authority but my own for the practice, but *so far* as I have used and recommended a mixture of lard and sulphur, the application has been speedily successful. Mix sulpher, one ounce, with lard, four ounces: if the sulphur should taste sour (and it will then be very yellow) it may either be washed in water, to remove the acid; (and the process will whiten the sulphur;) or a tea-spoon-ful of saleratus, or less of pearlash, may be added to it. Rub the ointment two or three times aday, on the affected parts.

Drouth versus *Drought*, p. 179. — Bacon spells the word drouth or drowth; and our great American authority says drought is written after the Belgic, improperly; and that the correct termination is *th*. I hope this orthography will be adopted.

Pulling off Potato Flowers, p. 187. — ("Cannot hardly:" if Professor Lindley really did put these two negatives together, we will leave him in the hands of the friends of education.) Let us read from Leibig: "Much attention has recently been drawn to the fact that the produce of potatoes may be much increased by plucking off the blossoms from the plants producing them, a result quite consistent with theory. This important observation has been completely confirmed by M. Leller, the director of the Agricultural Society at Darmstadt. In the year 1839, two fields of the same size, lying side by side and manured in the same manner, were planted with potatoes. When the plants had flowered, the blossoms were removed from those in one field, while those in the other field were left untouched. The former produced forty-seven bolls, [about 282 bushels,] the latter only thirty-seven bolls," [222 bushels. If this should prove to be the invariable result of blossom-plucking, would our farmers disflower their potato fields to obtain 500 bushels instead of 400? or would they not rather till an aker more to get one hundred?

Bots, p. 191. — Twelve or fifteen years ago, I had a section of the stomach of a recently dead horse sent to me to experiment on. It was completely lined with bots. I began forthwith to apply the unnumbered suveran* cures; first attempting to coax them off with milk and molasses. But I found that persuasives were vain. I then

* *Webster.*

opened a battery upon them, of turpentine, and arsenic, and corrosive sublimate, and oil of vitriol, in due succession; (enough one would think to kill a horse,) but their tentacles bid defiance to them all. I at last succeeded to my satisfaction by covering them all over with sulphur and setting fire to it. And since this, I have had no confidence in any other remedy. The mouths of the larvæ are so buried in the coats of the stomach, that no poison can reach them; and their bodies appear to be bomb-proof.

Grass for densely-shaded Lands, p. 200.—If the enquirer on page 153, has tried the grass here recommended (orchard grass) or shall hereafter try it on his wood-lands, I hope he will add his experience to the general stock in the Farmer and Gardener. I am preparing to put all my woodlands in orchard-grass, except a small portion which is too wet,, and have no doubt but that it can be done readily and profitably. I know of no valuable grass which will grow in very shaded lands, when the soil is permanently wet. Such a grass would be desirable, if the soil would not poach through the sod. There is but one grass I have any experience with, whose roots when thoroughly matted, would support an ox in such a soil: it is the *Phalàris americàna;* the variety *picta* is the "ribbon-grass" of our gardens. It spreads rapidly under favorable circumstances, from a few sods or mere roots; its roots are as large as a goose-quill, tough, numerous, and closely matted; its tall stems when in bloom bear a striking resemblance to the orchard-grass in flower; and cattle are fond of its herbage; but I have not been able to succeed in making it spread in my swamp, on account of the dense shade. I expect to accomplish this by thinning the wood. Six bushels of herds-grass (Agrostis) sown two years ago, on this land, have totally failed to coat it

J. T. P.

CRAW-FISH.

A. B. McKee, in the April number of the Farmer and Gardener, seems to be much annoyed in his low-land meadows with craw-fish. In the spring, he, says, they build large mud houses from six to twelve inches high, which become dry and hard with summer heat, and render it almost impossible in places, to mow the grass, and asks the question—"is there any remedy for this? and seems to desire an answer. I have thought to give him all the information I have on the subject. I know of but two remedies: one is to raise his low wet grounds to high and dry; the other is to watch his meadows, and as soon as the crawfish makes his hole, stop it with a corn cob.

A Farmer.

This latter method, we presume, would be generally declined. We have had no experience in this matter, and can only, therefore, make suggestions which may or may not prove valuable.

It is our impression that whatever shall cure soaked, wet, spungy ground will make it unfit for crawfish; they will then abandon it. This may be done by thorough draining, by open ditches, or what will be still better, by deep covered drains. In this manner, the soil will become compact, and sufficiently dry for tame grasses, especially if thoroughly top-dressed with sand.—*Ed.*

LETTERS OF A COSMOPOLITE---NO. 7.

Washington, D. C., April 1, 1846.

Editors Far. and Gard.—So much has been said by the numerous letter writers from this city, in the way of description, that it were a vain attempt to sketch any *new lineament* in the general portrait of the city, for there are none. The buildings, the offices, &c. &c. the painting and sculpture and all, are as familiar to the people, as is the court house or town pump in their immediate neighborhood. But, as different people see and are interested in diverse matters, I may, perhaps, say some unwritten thing if I follow the lead of nothing in particular, noting down all sorts and sizes without respect to greatness or goodness. So farewell to connection, congruity, and, perchance your reader may add, common sense, for at least *one* letter.

The patent office strictly occupies but two stories of the new edifice—perhaps the most imposing architectural piece in the city. In passing through the model-room I was struck first with disappointment, that so many elegant inventions should be here represented by so inferior models. A model presented to this office is intended for *show*, and should be showy and well finished—a perfect working-model. For all the necessities of the office or the inventor, drawings with skillful specifications are sufficient, and there is no use in depositing a wooden or tin model of an elegant machine, badly made, and a disgrace to the invention it is intended to illustrate and dignify. Hence I was disappointed when I found locomotive engines made of shingles and running on wheels made of ribbon-reels with a piece of a table leg for a chimney; or, a power-press concocted of similar materials with the addition only of the roughest kind of tow strings for *imitation gearing*. Then to see full-sized fag ends of trundle-heads as though one had been sawed up for fire-wood and one corner only saved as a relic; or a model paddle-wheel knocked together with a little wood, a little wire, and a great deal of putty; all these, and many other like failures, struck me unpleasantly and filled me with disappointment. There are, however, very many most elegant models; too many for one even to begin to enumerate; but they are hidden by an immense pile of disgraceful trash which, the sooner it is burnt the better.

It is one feature of our land, that every town and village has its ingenious man who *invents*, or at least does original tinkering. Thus much may be done in remote sections of the country; but when it comes to making a machine perfect, nothing can supply the place of the accomplished and well equipped machinest of the city. And village inventors, as well as painters, should bear in mind, that though their darling work may be the wonder of all the region round about, it by no means follows that it can compete with the finished efforts of regular masters.

Agricultural implements, plows, occupy no small space on the shelves of this office. I presume I saw at least 150 different plow models, each one unlike all the rest in some particular, though I could not, in all cases, see in what.

Then of hoes, harrows, hand and horse-rakes, cultivators, pruning tools, scythes, &c. &c. there is no end. The conclusion would seem to be, therefore, that farmers come in for their full share of our national ingenuity. Need I add, that their profession merits it?

Passing up stairs from the rooms of the patent office, the visitor enters a magnificent hall, devoted to the cabinets of the National Institute, including the collections of the recent Exploring Expedition. Innumerable curiosities, natural and artificial, grace the cases, from all parts of the world. In every window are rare, and valuable plants, and along the walls hang very many fine paintings; so that the general aspect of the room is highly beautiful and imposing.

I noticed here an officer and duty which I take to be truly indigenous. A man with a large sponge goes round to wipe up the private marks which the lovers of "the weed" are wont to impose upon every clean or showy floor. An idea suggested itself as I saw this process going on, that every visitor be inspected at the door, and if he appears at all dangerous in this line, that a boy follow him and receive at once the "*quid* pro quo" for services rendered.

Several cases in this room are devoted to the exhibition of American manufactures; woollen, cotton, brass and iron. The case containing malleable castings, is of interest, inasmuch as this very useful invention is of recent date, and shows strongly the connection between pure chemistry and the arts of economy and utility. Until this process, which I will briefly describe, was discovered, we had but two kinds of cheap iron ware—rough forgings or brittle castings. This process combines the two and yields smooth and tenacious articles.

The process in general may be understood thus: Cast iron is brittle because it is crystaline in its texture, and this crystaline state is owing to its combination with carbon or charcoal. Cast-iron in chemistry is carbonate of iron. Well, an article, say a cloak-hook, is first cast in good and smooth proportions, and then is deprived of its carbon and rendered tough by heating it very hot with any substance that will furnish oxygen enough to burn out the carbon, commonly an oxide of manganese. In the common process for converting cast into wrought iron, a blast of common air furnishes the oxygen; but this requires a heat so strong, that any piece of cast iron would lose its shape, and therefore the necessity for the more scientific process outlined above.

The plants and vegetables brought home by the Exploring Expedition are neither as numerous or as showy as I anticipated. There are four or five gardens and green-houses in Cincinnati which, to my uneducated eye, appear to me far more beautiful than this National Conservatory. The presumption is, however, that the collection must, by its uniqueness, compensate for any want in size or show. At a sale-garden in the city I found the most magnificent collection of roses I ever met. There seemed to be no end to their variety of tint and perfume, so that both residents and strangers were irresistibly tempted to stop and examine every time they passed.

During my visit to the magnetic telegraph office I had the pleasure of seeing the first trial and complete success of an important improvement in this useful invention; being nothing less than dispensing with the galvanic battery and all its expenses and substituting for it the current generated by a galvanic pair, one plate (zinc) being at Baltimore and the other (copper) here. This current, until within a few years, has been entirely unknown and unsuspected; and now, although known, has never been applied successfully to the excitation of an electro-magnet. After the instruments had been adjusted with this new arrangement, a communicption fully and satisfactorily established, it was interesting to see the enthusiasm and joy of the inventor and his chief assistants. "Hurrah!" said Professor Morse. "Huzza!" replied Mr. Rogers from Baltimore, *quicker* than thought. "Go it again" from Washington. "Keep it up" came clicking back in an instant. This delicacy of Professor Morse's magnets, as shown by this experiment, fills up the schedule of its advantages over all other telegraphs. It will convey more signs in a given time; it will record them itself without the aid of a receiving agent, and now it seems that all this can be done without a battery, and consequently without expense for maintainance! T. K. B.

PRESERVING FRUIT FROM THE FROST.

There seems to be a traditional tale among many, that fruit may be preserved from the effects of frost, by twisting a wisp of straw somewhat in the manner of a rope, and twisting it around a pole of sufficient length to reach to the top of the fruit tree, and place the pole perpendicularly by the body of the tree, the bottom being in a tub of water. One of my neighbors, says he recollects of seeing his father, fix a pole and wisp of straw, to a favorite Pear tree in the manner above mentioned, and the fruit was thereby preserved; when all the other pears in the neighborhood were destroyed. Others say throw the wisp of straw over the top of the tree, and let one end reach down into a tub of water, from whence I concluded if there be any truth in it, there will not be any difference in what manner the straw is placed so that it extends to the top of the tree, and the lower end be immersed in water. One neighbor says a rope will answer as well as straw. I can find no one who has tried it personally, but all have "*always heard it said.*" I once saw an article published in a "Farmers' Almanac" printed in Salem, Stokes county, North Carolina, on this subject, in which the operator stated he had tried it, and in order to become satisfied in regard to the principle on which it operates he placed by the side of the vessel of water containing the straw, another vessel of water without any thing in it. Next morning the vessel containing the lower end of the wisp of straw was covered with ice as thick as a pane of glass, while the other vessel was free from ice.

If any of your readers know any thing on the subject I hope they will inform the rest of us. Will J. T. F. tell us whether the truths of science will bear us out in the experiment or not.

Rushville, Ia. G. C. C.

We, too, have always *heard* of this protection and never tried it. We never were able to divine any reason for it. *Ed*

ANSWERS TO ENQUIRIES---ROOT-PRUNING.

That Pear Tree, p. 124.—I do not wish to meddle with questions exclusively addressed to the editor; but as he appended no answer to the enquiry here made of him, I am afraid that Gustavus will cut down that pear tree if some body does not arrest his arm. The editor has indeed given an answer incidentally to such a question, in the first vol. of the Farmer and Gardener, p. 154; and to it Gustavus may turn for information. It is about fifteen years since root-pruning was first recommended as a system, or perhaps only practiced that long systematically; and yet the merits of it are not generally known. Gustavus may be interested in the following paragraph from "Downing's Fruits and Fruit Trees of America:"

"Root-pruning in this country will, we think, be most valuable in its application to common standard trees, which are thrifty, but bare little or no fruit. They will generally be found to require but a single pruning to bring them into a permanently fruitful condition; and some sorts of pears and plums, which do not usually give a fair crop till they are twelve or fourteen years old, may be brought into fruit by this means as soon as they are of a proper size. Several nearly full grown peach, pear, and plum trees, on a very rich soil on the Hudson, which were over-luxuriant but bore no fruit, were root-pruned by our advice two years ago, and yielded most excellent and abundant crops last season."

Those "locust pins" no doubt acted by partially obstructing the flow of the juices: the same effect has been produced by driving a quantity of nails into the tree; and also by bruising the bark with a mallet.

I have pear trees not more than one and a half or two inches in diameter which have borne fruit: the trees were four and five year-old grafts, when the first crop appeared. This early fruitfulness I attributed to root-pruning, incidentally effected in transplanting the trees two or three times.

Agricultural Chimistry."—I am afraid H. C. B's remark, that the *phosphates* are essential to maize, and that *potash* is "the ingredient for wheat," will make a wrong impression on some readers. The seeds of *all grasses* yet examined, (and the small grains and Indian corn, are grasses,) contain a *phosphate;* and we know that *all* of these plants contain *potash*. Shephard found in the ashes of this very "corn grain" thirty-three per cent. of phosphates.* J. T. P.

SOMETHING FOR THE ORNITHOLOGIST.

There is at the residence of Dayton Holloway, near carthage, Rush county, Ind. quite a stranger to the people of this county. It is a fowl evidently of the aquatic species, and is certainly out of its native sphere. It has a beautiful plumage, the ground work being a dark greenish color, with specks of white all over the body, the head and neck are of a beautiful glossy green, with the exception of a color of white around the neck, about half way from the head to the body. It can neither walk nor fly, but swims when put in the water. When disturbed, it utters rather a piercing, plaintive cry. It will not eat any thing, I believe, at all. Fish were offered to it, and I cannot be positive but that it ate a little, I know that it refuses every thing else. It was found in the road on last thursday: how it came there no one knows. Many conjectures are formed as to its origin, but the only one which I think has any plausibility, is, that it was flying over from one country to another, and from some cause or other it became exhausted and fell to the earth, visiting a part where it was unlooked for. I was once in Doctor Plummer's cabinet of Specimens, &c., in Richmond, and if I mistake not, there is a stuffed specimen of a fowl resembling the above on a top shelf in the north side of the room. I was in his room but a few moments, and saw the fowl I have attempted to describe, a very short time; but I think they are of the same species precisely; though, on a close comparison, I might change my opinion. Will the Doctor give us a history of his specimen, its name, habits, &c.?

Rushville, Ia. G. C. C.

* *Chimistry*, Webster.

RATS.

If A. B. McKee who, enquires in No. 7 for something to destroy rats, will apply to David Craighead, M. D. of Indinapolis. he will find a preparation ready made, by one who understands it, price fifty-cents per box, with full directions how to use it. I have never known any instance in which it failed to destroy rats and mice when fairly tried. Some have failed in towns, for when they destroyed their own rats, those of their neighbors, glad to find a vacancy, would rush in and supply their places, perhaps in a day and night. In 1844, my father's house and barn were so infested with rats as to make it unsafe to leave a stocking, or, in fact, any thing in their way, about the house; and dared not leave any thing made of leather or cloth in their reach at the barn. But now, after using a single box of the above preparation, all things are entirely safe; our gears are as safe in the barn as any where else, and I have not seen a rat on the premises since its application. Before, nothing was more common in open daylight, more generally about sunset, than to see them scampering across the yard running after water &c. If the above preparation will not destroy them, if A. B. McKee or any other man will direct a letter to Daniel A. Clark, Beechgrove P. O., Rush county, Indiana, he will prepare some which he will *warrant*, and he authorized me to say, if any neighborhood will send him a call for a sufficient number of boxes to pay him for his trouble, he will go to any part of the State and insure his preparation to kill the rats.

Rushville, Ia. G. C. C.

IRISH WIT.—An American gentleman, some years ago, was showing an Irishman the figure of a ship very elegantly painted upon a wall at Harlem when the Hibernian, after viewing it with evident marks of delight, exclaimed, "by St. Patrick, it is mighty beautiful: I am shure it was never done in this country." "How can that be," said the American, "when you see it upon the wall?" "Arrah! and so it is," replied the other, much embarrassed at his own want of observation, "but I mean that he who did it never was here."

A fop is like a cinnamon tree—the *bark* is worth more than the body.

SELECTIONS.

TO DESTROY RATS.

A subscriber from Mooresville requests us to re-state the famous preparation for killing rats, as he was not a subscriber to the last volume in which it was contained.

"Melt hog's lard in a bottle plunged in water heated to about 150 deg. Fahrenheit: introduce into it half an ounce of phosphorus for every lb. of lard, then add a pint of proof spirit or whiskey; cork the bottle firmly after its contents have been heated to 150 deg. taking it at the same time out of the water; agitate it smartly till the phosphorus becomes uniformly diffused, forming a milky-looking liquid. This liquid being cooled, will afford a white compound of phosphorus and lard, from which the spirit spontaneously separates, and may be poured off to be used again, for none of it enters into the combination, but it merely serves to comminute the phosphorus, and diffuses it in very fine particles through the lard. This fairy compound, on being warmed very gently may be poured out into a mixture of wheat flour and sugar incorporated therewith, and then flavored with oil of rhodium or not, at pleasure. The flavor may be varied with oil of anniseed. This dough, being made into pellets, is to be laid into rat holes. By its luminousness in the dark it attracts their notice, and being agreeable to their pallates and noses it is readily eaten, and proves certainly fatal. They soon are seen issuing from their lurking places to seek for water to quench their burning thirst and bowels, and they commonly die near the water. They continue to eat as long as it is offered to them, without being deterred by the fate of their fellows, as it is known to be the case with arsenical doses."

The reader will observe Dr. Plummer's caution on p. 121, of this volume. We suppose that the specific for rat-killing, mentioned by G. C. C. in another column, is nothing but this. It is sold in fifty-cent boxes at the druggists; and might be bought by those who do not wish the trouble of compounding. But it is much cheaper to procure the materials, if one wishes any considerable quantity.—*Ed.*

BISCAYAN WAY OF RAISING ASPARAGUS.

The principal features of this mode are, to form beds about five feet in width and of any convenient length, and to sow the seed in March in two drills, two inches in depth and eighteen inches from the alleys; thus leaving a space of two feet between the drills. When the seedlings are about six inches in height, they are thinned to something more than a foot apart. Water is conducted once a day among the alleys and over the beds, so as to give these seedlings an abundant and constant supply of fluid during the season of their growth. This is the cultivation during the first year.

The second year, in the month of March, the beds are covered three or four inches in thickness with town sewerage, which remains on them during the summer, and which is lightly dug in during the succeeding autumn; the operation of irrigation being continued as during the first season. In the third spring after sowing, the asparagus is fit for cutting, all its energies being doubtless developed by the manure being dug in the autumn of the second year; and when it does begin to sprout, it finds its roots in contact with soil of unexhaustible fertility. Previously, however, to the cutting, each bed is covered, in the month of March, very lightly with dead leaves to the depth of about eight inches. The cutting does not commence till the plants peep through this covering, when it is carefully removed from the stems, in order that the finest only may be cut, which are rendered white by the leafy covering, and succulent by the excessive richness of the soil.

In the autumn the third year, after the first cutting, the leaves are removed, and the beds are again dressed with town sewerage, and these operations are repeated annually. In addition to this the asparagus ground is so situated that the beds are half under salt water at spring tides.

Since the above was published, several of our correspondents have have tried the plan in part, and, with one or two exceptions, with the very best results; but none seem to have *wholly* adopted the system, and, therefore, it may be said never to have yet been fairly put to the test of experiment.

Of those who have partly followed the Spanish method, one says, P. 435, 1842, "I forked into worn-out beds some manure from an old cucumber bed, levelled the surface, and completely covered beds with fine salt, at least a $\frac{1}{4}$ of an inch in thickness, leaving it to be washed in by the rains. The result was that every weed was killed, and the asparagus has thriven in a remarkable degree, throwing up numerous heads of large size and of excellent quality."

With equally good success another applied salt in summer at the rate of two pounds, per square yard. A third (see p. 429, 1844) in the spring of 1843 which was cold and wet, manured his beds, fourteen yards long and one wide, with salt at the rate of two lbs. to the yard. He adds, notwithstanding the unfavorble season, his produce was greater and finer than ever he previously had it. In the following year the same plan was adopted, the spring being dry and frequently hot, and the produce was even greater and better in every respect than that of the previous year. So satisfied is another correspondent with the system of salting asparagus beds, that he says (p. 334, 1844):—"I have a bed thirty feet in length, and five feet in width, on which I put one cwt. about the middle of March for two years successively. The increase of crop, both in regard to size and number, is most extraordinary; I intend to continue one cwt. of salt for this bed every March."

In like manner other writers used salt at the rate of from one pound to two and a half pounds per square yard with the most striking advantage, applying it after cutting off the tops, and in spring, in rainy weather.

From these and numerous other instances it would appear that the beneficial effects of salt as a manure for asparagus is now fully established, provided it is applied at a proper period, which, in the majority of cases, has been when the plant was in a growing state. Mr. Bree, of Stowmarket, however, applied it with great advantage (see p. 621, 1844) after dressing the beds in autumn, and

again *early* in spring, using one pound to a square yard. He argues that the salt has to be washed through a considerable depth of soil before it reaches the root, and when it does arrive there that its caustic character will have materially altered by dilution and chemical decomposition, and that it will do no harm then, but that it is injurious when applied to the delicate texture of the young shoots late in the spring.

In the few cases in which salt has been said to be injurious, the beds have either been in bad condition as regards drainage (see page 444, 1844), or it has been applied to beds newly formed (see page 489 and 529, 1845), and therefore to plants with wounded roots, for such recently planted asparagus must be considered to be, however carefully the plants may have been taken up. The same injurious effect might also be produced by the salt coming in contact with wounded portions of the plant, whether of the roots in consequence of cutting the sides of the beds when throwing up the soil from the alleys or of the crown in cutting the shoots. A tree will be killed by the application of a quantity of salt to a cut root, although a much larger quantity might be given with impunity when the roots are in a sound state.

Along with the salt some have used nightsoil; liquid manure fixed and prepared with sulphuric acid; Potter's liquid guano at the rate of half a pound per square yard, following the application by plenty of water. These have been all employed with marked advantage.

It must be mentioned, however, that it is the opinion of the best cultivators, that, in addition to these substances, asparagus must have farm-yard manure, if it is to be grown well. This is probably true in the case of heavy, or close land; but in loose friable soil must be unnecessary, for such soils do not require that their texture should be improved.

What a pity it is that up to the present time no one has, as far as we are aware, carried out the Biscayan plan exactly. *Gard. Chron.*

The references in the above article, refer to the London Gardeners' Chronicle. — *Ed.*

THE DISEASES OF THE HORSE,

CONTINUED.

Farcy.—While the arterial capillaries are engaged in building up the frame, the absorbents are employed in removing that which is not only useless, but would be poisonous and destructive. They take up the matter of glanders and of every ulcerating surface, and they are occasionally irritated, inflamed and ulcerated from the acrimonious nature of the poison which they carry. The absorbents are furnished with numerous valves. The fluid is for a while arrested by them, and there the inflammation is greatest, and ulceration takes place. This is the history of the farcy cords and buds. Farcy is a highly contagious disease, whether or not it be connected with glanders. It, however, occasionally admits of cure from the application of the cautery to the buds, and the administration of corrosive sublimate or the sulphate of iron internally.

The skin of the horse is subject to various diseases. Large pimples or lumps suddenly appear on it, and, after remaining a few days, the cuticle peels off, and a circular scaly spot is left. This is called *surfeit*. The cause is obscure, but principally referrable to indigestion. A slight bleeding will always be serviceable. Physic rarely does good, but alteratives composed, of nitre, black antimony, and sulphur, will be very beneficial. *Mange* is a disease of a different character. It is the curse of the stable into which it enters, for it will almost certainly affect every horse. Thorough dressings with Barbadoes tar and linseed oil, in the proportion of one of the former to three of the latter, will be the most effectual external application, while alteratives and physic should be given internally. *Hide-bound* is a very appropriate term for the peculiar sticking of the hide to the ribs when a horse is out of condition. The subcutaneous adipose matter is all absorbed. The alterative above recommended will be very useful here.

The legs, and the hind ones more than the fore ones, are subject to frequent and great and obstinate swellings, attended by great pain and considerable fever. It is acute inflammation of the cellular substance of the legs. Physic and diuretics, and tonics if there is the slightest appearance of debility, are the proper means of cure. Friction and bandages will also be useful occasionally. There is no disease in which the farrier and the groom do greater mischief than in this.

Grease is an undue secretion of the fluid which was designed to lubricate the skin of the heels, and that secretion is also altered in quality. The hind legs begin to swell — a fluid exudes from the heels—the hairs of the heels become erect like so many bristles, and the skin of the heel is hot and greasy. Soon afterward cracks appear across the heel; they discharge a thick and offensive matter, and then deepen. They spread up the leg, and so does the tumefaction of the part. In process of time the skin, inflamed and ulcerated, undergoes an alteration of structure; prominences or granulations appear on it, assuming the appearance of a collection of grapes, or the skin of a pine-apple. They increase, and a fetid discharge appears from the crevices between them.

The cause is generally neglect of the horse. He is suffered to stand in the stable with his heels cold and wet, which necessarily disposes them to inflammation and disease.

In the first stage of grease, bran or turnip or carrot poultices will be serviceable, with moderate physic. Then astringents must be employed, and the best are alum or sulphate of copper in powder, mixed with several times the quantity of Bole Armenian, and sprinkled on the sores. These should be alternated every three or four days. The grapy heels are a disgrace to the stable in which they are found, and admit not of radical cure.

Splints are bony enlargements, generally on the inside of the leg, arising from undue pressure on the inner splint bone, and this either caused by the natural conformation of the leg, or violent blows on it. These excrescences will often gradually disappear, or will yield to a simple operation, or to the application of the hydriodate of potash or blister ointments. *Sprains*, if neglected occasionally become very serious evils. Rest, warm fomentations, poultices, or, in bad cases, blistering are the usual remedies. *Windgalls*, if

they are of considerable size, or accompanied by much inflammation or lameness, will find in a blister the most effectual remedy. *Sprains of the fetlock* demand prompt and severe blistering. Nothing short of this will produce a permanent cure. *Sprains of the pastern and coffin-joints* demand still more prompt and decisive treatment. If neglected or inefficiently managed, the neighboring ligaments will be involved, more extensive inflammation will be set up, and bony matter, under the name of *ring-bone*, will spread over the pasterns and cartilages of the foot. Firing alone will, in the majority of cases, be efficient here.

Inflammation of the foot, or acute founder.—In speaking of the structure of the foot, the laminæ, or fleshy plates on the front and sides of the coffin bone, were described. From over-exertion, or undue exposure to cold or wet, or sudden change from cold to heat, inflammation of these laminæ is apt to occur, and a dreadfully painful disease it is. It is easily detected by the heat of the feet, and the torture which is produced by the slightest touch of the hammer. The shoe must be removed, the sole well pared out, plentiful bleeding from the toe had recourse to, the foot well poulticed, and cooling medicines resorted to. The bleeding should be repeated if manifest benefit is not procured, and cloths dipped in dissolved nitre, which are colder than the common poultice, should be substituted. After this a poultice around the foot and pastern should succeed. Little food should be given, and that should consist of green meat or mashes.

Pumiced Feet.—This is one of the consequences of inflamed feet. The sole of the foot becomes flattened, or even convex, by the pressure of the weight above. There is no cure here, and the only palliation of the evil is obtained from the application of a shoe so bevelled off from the crust that it shall not press upon or touch the sole. This, however, is only a temporary palliation, for the sole will continue to project, and the horse will be useless.

Contracted Feet.—By this is meant an increase in the length of the foot, and a gradual narrowing as the heels are approached; and as the necessary consequence of this, a diminution of the width of the foot and a concavity of the sole. In point of fact, the whole of the foot, including the coffin bone, becomes narrowed, and consequently elongated. This change of form is accompanied by considerable pain; the action of the horse is altered; there is a shortened tread, and a hesitating way of putting the foot to the ground.

The frog and heel would expand when the weight of the horse descends and is thrown upon them, but the nailing of the shoe at the heels prevents it. Thence the pain and lameness. Mr. Turner of Regent street obviates this by a very simple method. He puts four or five nails in the shoe on the outside, and only two on the inside. There is then sufficient room for the natural expansion to take place, and the foot and action of the horse are little or not at all changed. This is an admirable contrivance, and recourse should always be had to it.

The Navicular Joint Disease.—There are many horses with open and well-formed feet that are lame. In every motion of the foot there is a great deal of action between the navicular bone and the flexor tendon which passes over it in order to be inserted into the navicular bone. From concussion or violent motion, the membrane or the cartilage which covers the navicular bone is bruised or abraded, the horse becomes lame, and often continues so for life. This disease admits of remedy to a very considerable extent; no one, however, but a skillful veterinary surgeon is capable of successfully undertaking it.

Sand-crack is a division of the crust of the hoof from the upper part of it downward. It bespeaks brittleness of the foot, and often arises from a single false step. If the crack has not penetrated through the horn, it must nevertheless be paired fairly out, and generally a coating of pitch should be bound round the foot. If the crack has reached the quick, that *must* be done which ought to be done in every case—a skillful surgeon should be consulted, otherwise false quarter may ensue.

False Quarter is a division of *the ligament* by which the crust is secreted. It is one of the varieties of sand-crack, and exceedingly difficult to cure.

Thread or *Overreach* is a clumsy habit of setting one foot upon or bruising the other. It should immediately and carefully be attended to, or a bad case of *quittor* may ensue.

Quittor is the formation of little pipes between the crust and the hoof, by means of which the purulent matter secreted from some wound beneath the crust makes its escape. The healing of this, and of every species of *prick* or *wound* in the sole or crust, is often exceedingly difficult.

ACCOMMODATING.—"My friend," said a creditor to a delinquent, "I wish you would pay this note; it is almost worn out." "Just step into my office my dear fellow, and I will copy it off on a pasteboard which will last forever, was the consoling reply.

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